

Patent claims:

1. A method of producing a pressure-sensitive adhesive article having at least one layer of an electrically conductive pressure-sensitive adhesive, characterized in that a layer of the electrically conductive pressure-sensitive adhesive that is anisotropic at least in respect of one property is produced in a coating process by stretching, drawing or compressing, said layer possessing in at least one direction along the plane of the layer a shrinkback of at least 3% in respect of the longitudinal extent of the layer, measured on the free pressure-sensitive adhesive film.

2. The method of claim 1, characterized in that the coating process is a hotmelt roll coating process, a melt diecoating process or an extrusion coating process.

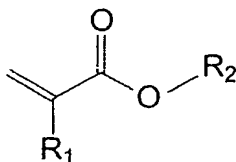
3. The method of claim 1, characterized in that the coating process is a conventional coating process with subsequent stretching or drawing on a stretchable carrier.

4. The method of any one of claims 1 to 3, characterized in that the electrically conductive pressure-sensitive adhesive is coated onto one or both sides of a sheetlike or tapelike carrier.

5. The method of claim 4, characterized in that the carrier is a transfer tape, a release liner or an electrically conducting carrier material.

6. The method of any one of claims 1 to 5, characterized in that the pressure-sensitive adhesive used is based on polyacrylate and/or polymethacrylate.

7. The method of claim 6, characterized in that the pressure-sensitive adhesive is based to an extent of at least 50% by weight on at least one acrylic monomer from the group of the compounds of the following general formula:



where $R_1 = H$ or CH_3 and the radical $R_2 = H$ or CH_3 or is chosen from the group of the branched or unbranched, saturated alkyl groups having 2 – 30 carbon atoms and the average molecular weight M_w of the pressure-sensitive adhesive is at least 200 000 g/mol.

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8. The method of any one of claims 1 to 6, characterized in that crosslinkers, especially difunctional or polyfunctional acrylates and/or methacrylates, difunctional or polyfunctional isocyanates or difunctional or polyfunctional epoxides, have been added to the pressure-sensitive adhesive.

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9. The method of claim 8, characterized in that the pressure-sensitive adhesive is crosslinked, preferably photochemically, immediately after or during hotmelt coating.

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10. The method of any one of claims 1 to 9, characterized in that electrically conductive materials, especially metal particles, metal powders, metal beads, metal fibers, the metals being in particular nickel, gold, silver and copper or the following nickel-coated particles: copper particles, nickel particles, polymer beads, polymer particles or glass microbeads or hollow glass microbeads, have been admixed to the pressure-sensitive adhesive.

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11. The method of claim 10, characterized in that the electrically conductive materials are admixed in a fraction of up to 200% by weight, preferably between 5% and 50% by weight, more preferably between 10% and 40% by weight, based on the weight of the pressure-sensitive adhesive.

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12. The method of any one of claims 1 to 11, characterized in that the electrical conductivity of the pressure-sensitive adhesive is between 1 and 500 S/cm.

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13. The method of any one of claims 1 to 12, characterized in that the electrical conductivity is anisotropic and is lower along a plane lying in the pressure-sensitive adhesive layer than transverse to the plane of the layer, it being at least 2 S/cm in a direction transverse to the plane of the layer.

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14. The method of any one of claims 1 to 13, characterized in that the pressure-sensitive adhesive comprises further substances or additives, such as aging inhibitors,

light stabilizers, ozone protectants, fatty acids, plasticizers, nucleators, expandants, accelerators and/or fillers.

15. A pressure-sensitive adhesive article, in particular for bonding two electrical parts,
5 obtainable by a method of any one of claims 1 to 14.

16. The pressure-sensitive adhesive article of claim 15 in the form of a diecut.